



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,425	03/01/2004	Shinji Ichikawa		4966
7590	09/09/2005		EXAMINER	
George A. Loud, Esquire BACON & THOMAS Fourth Floor 625 Slaters Lane Alexandria, VA 22314-1176				CHARIOUI, MOHAMED
		ART UNIT	PAPER NUMBER	2857
DATE MAILED: 09/09/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/788,425	ICHIKAWA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Mohamed Charioui	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 24 June 2005.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al. (U.S. 6,314,347). in view of Kolls (U.S. 6,853,894).

**As per claim 1 and 6,** Kuroda et al. teach traveling information storing means for storing travel data comprising at least vehicle speed and position of the vehicle (see col. 1, line 35 to col. 2, line 21); candidate traveling speed pattern generating means for generating plural candidate traveling speed patterns on the basis of only the travel data stored in the traveling information storing means (see col. 5, line 10-42 and col. 1, line 35 to col. 2, line 32); and estimated traveling speed pattern outputting means for extracting a candidate traveling speed pattern matching current travel environment data from among the generated traveling speed patterns and outputting an estimated traveling speed pattern for a route to be followed (see col. 1, lines 49-52 and col. 4, lines 55-67).

Kuroda et al. fail to teach that the travel environment data comprising at least date-and time and weather information as mutually associated data.

Kolls teaches this feature (see col. 16, lines 33-52; col. 19, lines 16-26; col. 19, line 62 to col. 20, line 7; and col. 36, line 66 to col. 37, line 9). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Kolls's teaching into Kuroda et al.'s invention because it would provide more information about the travel conditions. Therefore, travel speed pattern would be adequately estimated for an efficient and safe trip.

**As per claim 2,** Kuroda et al. further teach frequent route specifying means for specifying a frequently used route on the basis of the travel data (see col. 6, lines 46-58); and dividing means for dividing the frequently used route into short sections (see col. 1, lines 40-48), wherein the candidate traveling speed pattern generating means generates the candidate traveling speed pattern for each of the short sections (see col. 2, lines 22-32), and the estimated traveling speed pattern outputting means extracts a candidate traveling speed pattern for each of the short sections, and outputs an estimated traveling speed pattern for the specified frequently used route (see col. 1, lines 49-52).

**As per claim 3,** Kuroda et al. further teach that the candidate traveling speed pattern generating means classifies the travel data for each of the short sections on the basis of an average traveling speed for each of the short sections or a degree of similarity among traveling speed patterns for each of the short sections, and generates a traveling speed pattern representing a set of the classified travel data for each of the short sections as the candidate traveling speed pattern (see col. 6, line 65 to col. 7, line 34).

**As per claim 4,** Kuroda et al. further teach that estimated traveling speed pattern outputting means extracts travel data matching current traveling environment data for each of the short sections, extracts a candidate traveling speed pattern representing a set to which a greatest number of the travel data belong, and outputs the estimated traveling speed pattern (see col. 6, line 65 to col. 7, line 34 and col. 4, lines 55-67).

**As per claim 5,** Kuroda et al. further teach that the travel environment data include date, hour, day of the week (see col. 6, lines 46-58), information on operation of on-board equipments including at least a wiper and a headlight, and sensing information obtained from on-board sensors including a raindrop sensor (see col. 1, lines 21-30 and col. 4, lines 20-25).

#### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that Kuroda et al. disclose a single vehicle speed pattern is generated for a given stretch of road, while the present invention discloses a plural number of such patterns.

The examiner believes that Kuroda et al. select a speed pattern from a plurality of speed patterns in every section of the road (see col. 5, lines 13-43).

#### ***Conclusion***

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### **Contact information**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed Charioui whose telephone number is (571) 272-2213. The examiner can normally be reached Monday through Friday, from 9 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mohamed Charioui

8/30/05



MARC S. HOFF  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800